Abstract

A lot of research is currently focused on image processing in low or low light conditions, in order to produce good and clear images. So this study aims to translate images taken in low light conditions or even at night to produce a clear image or like an image with good light quality or taken in daytime conditions. To make it happen, this study uses two categories of datasets, namely images, which is taken with day conditions and datasets with night conditions which are then trained using DCGAN (Generative Adverserial Network). With this method, the machine will be trained with the initial input is a night image, then it will enter the GAN generator for further processing so that it produces a daytime image and then compare, whether the results are similar to the daytime image found on the GAN discriminator. Then the model is evaluated by calculating the value of the SSIM or its loss value using L2 to determine whether the DCGAN performance that was built has got good results or not.

Keywords: computer vision, DCGAN, discriminator, generator, image, dataset